



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5 CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET
CHICAGO, ILLINOIS 60605

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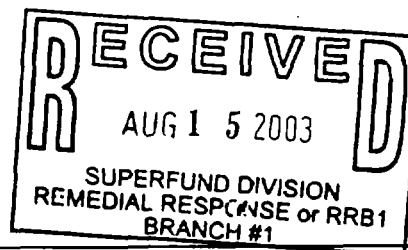
EPA Region 5 Records Ctr.



222400

Date: 12/4/02
Subject: Review of Region 5 Data for Himco Dump
From: Francis Awanya, Group Leader *FAA*
Region 5 Central Regional Laboratory
To: Superfund, US EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Attached are Results for: Himco Dump



Analyses included in this report:

Anions by IC

Sylvia Griffin

DEC 10 5 2002

Data Management Coordinator and Date Received

Date Transmitted: DEC 10 5 2002

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at 3-7444 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

Received by and Date

Comments:



Environmental Protection Agency Region 5
Central Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5
77 West Jackson Boulevard
Chicago IL, 60604

Project: Himco Dump
Project Number: 2003SY01
Project Manager: Doug Yeskis

Reported:
Dec-04-02 16:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
2003SY01R02-Pump Blank	0211001-01	Water	Oct-31-02 11:50	Nov-01-02 11:27
2003SY01S04-WT116A	0211001-02	Water	Oct-31-02 13:52	Nov-01-02 11:27
2003SY01D04-WT116A	0211001-03	Water	Oct-31-02 13:52	Nov-01-02 11:27
2003SY01S05-WT115A(MS/MSD)	0211001-04	Water	Oct-31-02 15:00	Nov-01-02 11:27



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Project: Himco Dump
Project Number: 2003SY01
Project Manager: Doug Yeskis

Reported:
Dec-04-02 16:43

Inorganic Analytes by Ion Chromatography
US EPA Region 5 Central Regional Laboratory

2003SY01R02-Pump Blank (0211001-01) Water Sampled: Oct-31-02 11:50 Received: Nov-01-02 11:27

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Chloride	U		0.0500	0.150	mg/L	1	B2L0301	Nov-25-0	Nov-26-02
Bromide	U		0.0140	0.500	"	"	"	"	Nov-25-02
Sulfate as SO4	U		0.0250	0.750	"	"	"	"	"

2003SY01S04-WT116A (0211001-02) Water Sampled: Oct-31-02 13:52 Received: Nov-01-02 11:27

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Chloride	16.5		0.0500	0.150	mg/L	1	B2L0301	Nov-25-0	Nov-26-02
Bromide	2.96		0.0140	0.500	"	"	"	"	Nov-25-02
Sulfate as SO4	497		0.0250	0.750	"	"	"	"	Nov-26-02

2003SY01D04-WT116A (0211001-03) Water Sampled: Oct-31-02 13:52 Received: Nov-01-02 11:27

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Chloride	18.1		0.0500	0.150	mg/L	1	B2L0301	Nov-25-0	Nov-26-02
Bromide	2.96		0.0140	0.500	"	"	"	"	Nov-25-02
Sulfate as SO4	502		0.0250	0.750	"	"	"	"	Nov-26-02

2003SY01S05-WT115A(MS/MSD) (0211001-04) Water Sampled: Oct-31-02 15:00 Received: Nov-01-02 11:27

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Chloride	20.8	L	0.0500	0.150	mg/L	1	B2L0301	Nov-25-0	Nov-26-02
Bromide	0.780		0.0140	0.500	"	"	"	"	Nov-25-02
Sulfate as SO4	274		0.0250	0.750	"	"	"	"	Nov-26-02



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Reported:
Dec-04-02 16:43

Inorganic Analytes by Ion Chromatography - Quality Control
US EPA Region 5 Central Regional Laboratory

Batch B2L0301 - General Preparation

Blank (B2L0301-BLK1)

Prepared & Analyzed: Nov-25-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Bromide	U		0.0140	0.500	mg/L						

Blank (B2L0301-BLK2)

Prepared & Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Chloride	0.300		0.0500	0.150	mg/L						
Sulfate as SO4	U		0.0250	0.750	"						

LCS (B2L0301-BS1)

Prepared & Analyzed: Nov-25-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Bromide	0.970		0.0140	0.500	mg/L	1.00		97.0	80-120		

LCS (B2L0301-BS2)

Prepared & Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Chloride	6.19		0.0500	0.150	mg/L	6.00		103	80-120		
Bromide	19.8		0.0140	0.500	"	20.0		99.0	80-120		
Nitrate as NO3	20.5		0.0140	0.500	"	20.0		102	80-120		
Orthophosphate as PO4	29.9		0.0310	0.750	"	30.0		99.7	80-120		
Sulfate as SO4	30.5		0.0250	0.750	"	30.0		102	80-120		

Duplicate (B2L0301-DUP1)

Source: 0211001-04

Prepared & Analyzed: Nov-25-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Bromide	0.790		0.0140	0.500	mg/L		0.780			1.27	20

Duplicate (B2L0301-DUP2)

Source: 0211001-04

Prepared & Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Chloride	20.3		0.0500	0.150	mg/L		20.8			2.43	13
Sulfate as SO4	277		0.0250	0.750	"		274			1.09	3

Duplicate (B2L0301-DUP3)

Source: 0211004-01

Prepared & Analyzed: Nov-26-02

Report Name: 0211001

Francis Awanya, Group Leader

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Project: Himco Dump
Project Number: 2003SY01
Project Manager: Doug Yeskis

Reported:
Dec-04-02 16:43

Inorganic Analytes by Ion Chromatography - Quality Control
US EPA Region 5 Central Regional Laboratory

Batch B2L0301 - General Preparation

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Chloride	71.2		0.0500	0.150	mg/L		73.5			3.18	13

Matrix Spike (B2L0301-MS1) Source: 0211001-04 Prepared: Nov-25-02 Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Peromide	1.78		0.0140	0.500	mg/L	1.00	0.780	100	80-120		

Matrix Spike (B2L0301-MS2) Source: 0211001-04 Prepared & Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Chloride	8.73		0.0500	0.150	mg/L	6.00	20.8	763	80-120		
Sulfate as SO4	57.3		0.0250	0.750	"	30.0	274	1214	80-120		

Matrix Spike (B2L0301-MS3) Source: 0211004-01 Prepared & Analyzed: Nov-26-02

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Chloride	12.0		0.0500	0.150	mg/L	6.00	73.5	76.7	80-120		



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Dec-04-02 16:43

Notes and Definitions

- L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
- U Not Detected
- NR Not Reported

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
	Anions by IC	(Water)	Result calculations based on MDL
0211001-04	Anions by IC	Chloride	L
B2L0301-BLK2	Anions by IC	Chloride	Blank >1 x MRL
B2L0301-MS2	Anions by IC	Sulfate as SO4	Exceeds lower control limit
B2L0301-MS2	Anions by IC	Chloride	Exceeds lower control limit
B2L0301-MS3	Anions by IC	Chloride	Exceeds lower control limit

Sample, Log and Extraction Comments

Data Set Number:	<u>0211001</u>	Parameter:	<u>Bromide, Chloride, and Sulfate</u>
Facility Name:	<u>HIMCO DUMP</u>		
Study Name:	<u>HIMCO DUMP</u>		
Date of Narrative:	<u>12/04/2002</u>	Analyst:	<u>Francis A. Awanya</u>
Prepared by:	<u>FAA</u>	Signature:	<u>FAA</u>

ANALYSIS CASE NARRATIVE

A total of four (4) waters samples, collected for the above study, were received at the Central Regional Laboratory (CRL) on 11/01/2002. CRL sample identification numbers were assigned to those samples. Samples with identification numbers 0211001-01, 0211001-02, 0211001-03, and 0211001-04 were received for analysis. Other pertinent information and dates are provided in the final analysis report.

Samples were checked out for anions analysis from the CRL sample custodian on 11/25/2002. They were transferred to the Analytical and Inorganic (A&I) laboratory section of the CRL and kept in a sample storage refrigerator until analysis was completed. Analysis was completed within the holding time on 11/26/2002.

SAMPLE ANALYSIS:

Samples were analyzed for bromide, chloride and sulfate anions using CRL Standard Operating Procedure (CRL.SOP) AIG045 (Method reference 300 A & B, EPA/600/R-93-100). No additional sample preparation was necessary. Samples analyses were completed between 11/25-26/2002. All analysis was completed within the required holding times.

QUALITY CONTROLS (QC):

Analysis results were evaluated using the QC requirements of CRL.SOP AIG045 (Method reference 300 A & B, EPA/600/R-93-100). All required quality control criteria for the laboratory, method, and system performance audits were determined to be within CRL's QC limits with the following exception:

Chloride: Continuing calibration blanks were found to contain 0.30, 0.32, 0.33, and 0.31 mg/L of chloride. The limit for this audit is 0.05 mg/L. Chloride concentrations in all samples except field blank 0211001-01 were more than ten times the amount in the blank. Sample results were not flagged on this basis. The matrix spike recovery for chloride (recovery = 76.3%) was out of the limit (Limit = 100 ± 20%). The spiked blank recovery result was within limits. Chloride results for those samples could be biased low. "L" flag is applied to chloride result for sample 0211001-04. Samples with similar matrices should be flagged accordingly.

Sulfate: One of four continuing calibration blanks analyzed after the spike was found to contain 1.6 mg/L of sulfate. The limit is 0.025 mg/L. A probable cause is carry-over. Re analysis of the blank indicated no sulfate contamination. Sulfate concentrations in all samples except field blank sample 0211001-01 were more than ten times the amount in the blank. No sulfate was

Data Set Number:	<u>0211001</u>	Parameter:	<u>Bromide, Chloride, and Sulfate</u>
Facility Name:	<u>HIMCO DUMP</u>		
Study Name:	<u>HIMCO DUMP</u>		
Date of Narrative:	<u>12/04/2002</u>	Analyst:	<u>Francis A. Awanya</u>
Prepared by:	<u>FAA</u>	Signature:	<u>FAA</u>

ANALYSIS CASE NARRATIVE

found in the field blank. All sample results were not flagged on this basis.

Anions column cleaning procedure will be performed. A new set of columns was ordered for low level analysis. This could not be done with this set of samples because of holding time considerations.

SAMPLE RESULTS AND REPORTING:

No observation affecting sample results or anything of significance to report.

MANUAL PEAK INTEGRATION:

No manual peak integration was used to process the results.

ELECTRONIC DATA:

Electronic data are archived in;
H:\R5cr\VOL1\MIN_NUT\FAWANYA\DX500_SYSTEM1_ED40\0211001\..under the following additional folders;

1. Autosample_Schedules, 2. Datafiles 3. Method_files 4.Narrative.



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Central Regional Laboratory

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WORK ORDER

Printed: 12/4/02 9:23:06AM

0211001

US EPA Region 5 Central Regional Laboratory

Client: Superfund, US EPA Region 5
Project: Himco Dump

Project Manager: Marilyn Jupp
Project Number: 2003SY01

Report To:

Doug Yeskis
Superfund, US EPA Region 5

77 West Jackson Boulevard
Chicago, IL 60604

Phone: 6-0408
Fax: (312) 886-6171

Date Due: Dec-03-02 15:00 (30 day TAT)

Received By: William Sargent

Date Received: Nov-01-02 11:27

Logged In By: William Sargent

Date Logged In: Nov-01-02 13:12

Samples Received at: °C
All containers intact: No
Sample labels/COC agree: No
Samples Preserved Properly: No
Custody Seals Present: No

Analysis	Due	TAT	Expires	Comments
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0211001-01 2003SY01R02-Pump Blank [Water] Sampled Oct-31-02 11:50 Central

Anions by IC	Dec-03-02 12:00	30	Nov-28-02 11:50	Ph(6)
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0211001-02 2003SY01S04-WT116A [Water] Sampled Oct-31-02 13:52 Central

Anions by IC	Dec-03-02 12:00	30	Nov-28-02 13:52	Ph(7)
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0211001-03 2003SY01D04-WT116A [Water] Sampled Oct-31-02 13:52 Central

Anions by IC	Dec-03-02 12:00	30	Nov-28-02 13:52	Ph(7)
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0211001-04 2003SY01S05-WT115A(MS/MSD) [Water] Sampled Oct-31-02 15:00 Central

Anions by IC	Dec-03-02 12:00	30	Nov-28-02 15:00	Ph(7)
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